CERTAINE
brief and neceſſarie rules of Geographie, ſeruing for the vnderſtanding of Chartes and Mappes.

Collected by D. P.

Rogatu honoratiſs. viri
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Certayne rules of Geographie, for the vnderſtanding of Mappes and Chartes.

THe perfect vnderſtanding of Mappes and the vſe of the ſame dothe conſiſte in the knowledge of theſe foure poynts.

1 The neceſſarie circles deſcribed in Mappes.

2 The longitude & latitude of places.

3 The Clymats and Paraleles.

4 The meaſure of diſtaunce of one place from another.

1 Of the Circles.

The circles expreſſed in Mappes are fiue, the Equinoctiall, the 2. Tropikes, and the two Polare circles.

The Equinoctiall or Equator, is a circle imagined iuſt in the midſt betwæne the two Poles, compaſſing the whole earth about.

1 This circle deuideth the worlde into two equall parts, that is ſo ſaye, the

North and the South.

2 It ſerueth alſo to know the Longitude of places, which is meaſured vpon it, and the Latitude which is meaſured from it, either Northwarde or Southwarde.

3 When the Sunne is in it, the day is equall with the nighte throughout all the worlde.

4 When the Sunne is furtheſt from it, the day is either ſhorteſt or longeſt.

The Tropikes are thoſe circles which the Sunne maketh about the worlde, when it is furtheſt from the Equinoctial either Northwarde or Southwarde.

If it be Northwarde it is called the Tropike of Cancer, bicauſe the Sunne then returning backwardes entreth into that ſigne.

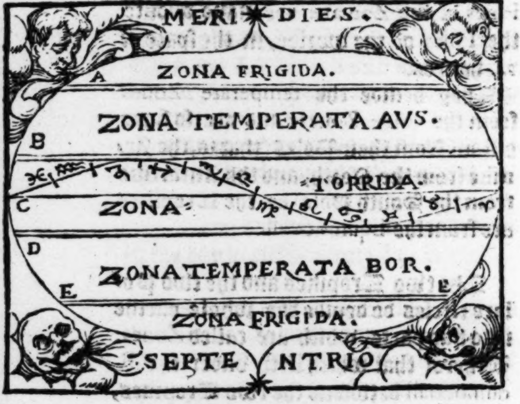
If it be Southwarde it is called the Tropike of Capricorne, bicauſe then the Sunne entreth into the ſigne of Capricorne.

Theſe circles do deuide the temperate Zones from the burnt Zone.

The Polare circles are thoſe which the Poles of the Zodiake doe make aboute the Poles of the worlde, in the ſpace of 24. houres.

They deuide the temperate Zones from the colde Zones: and are ſo farre diſtant from their Poles (that is, the Arctike from the North, and the Antartike from the South Pole) as the Tropikes are from the Equinoctiall.

The two Tropikes and the two Polare circles do deuide the whole earthe into fiue parts, which are called Zones. Wherof that which lieth vnder the Equinoctiall betwéene the two Tropikes, is called the burnte Zone: the other two betwixt either of the Tropikes and the Polare circles are called Temperate Zones: and the other two vnder either Pole are called colde Zones.



2 Of the Longitude and Latitude.

In reckning yͤ Longitude of yͤ worlde, the auncient Geographers tooke their beginning at a right line imegined to be drawne from the one Pole to the other, by the Ilandes called the *Canaries*, beyonde Hercules pillers (which lyne for this purpose I call the VVeſterne line) ſo that the Longitude of any place is the diſtaunce

ſtaunce of the ſame from that line Eaſtwarde, and ſo rounde aboute vnto the ſame line agayne.

Some late writers do reckē the Longitude frō the VVeſterne line Eaſtward 180. degrées, and alſo from the ſame weſtward.180.degrées, which béeing added togither do make.360.deſcribing it in the middeſt betwene the two Poles, and deuiding the world into.2.equall partes, wherof the Weſterne they call the Ponent, and the Eaſterne the Leuant.

The latitude is the diſtaunce of any place frō the Equinoctiall circle towards either of the Poles.

Where ſo euer you are, imagine a poynt or pricke directly ouer your head, which is called Zenith, the diſtāce whereof from the VVeſterne lyne, is the longitude, and from the Equinoctiall the latitude. And for this purpoſe in the vniuerſall Chartes, you haue lines (called Meridians) drawne in lengthe from Pole to Pole, diſtant one from another 10.degrées, beginning at the VVeſterne lyne, and ſo Eaſtwarde, which doe euidently ſhew the Longitude of any place.

There are alſo drawne certaine Paraleles from the Equinoctiall towardes either of the Poles, differing one from another.10.degrées,declaring the Latitude.

Note that the latitude or diſtance frō the Equinoctiall line, and the eleuation of the Pole in any place are equall.

3 Of Climates and Paraleles.

The Climates & Paraleles ſerue both for one purpoſe, that is, the difference of the longeſt dayes, whiche doe increaſe within certayne ſpaces from the Equinoctiall towards either of the Poles.

A Climate is a ſpace of diſtance from the Equinoctiall line, where the longeſt day maketh difference of halfe an houre.

The olde writers do make but ſeuen Climates, and doe name them of ſome notable and famous place.

1 The firſt they name of *Meroe* a citie in *Afrike*, vnder the burnte Zone, thys cōteineth in brodneſſe.7.degrées,40. mi.

It

It { beginneth / endeth } at { 12.deg.45.mi. / 20.deg.30.mi. }

The longeſt day. { Prin.12.h.45.m. / Fin.13.h.15.m. }

principio ſx
climatis.

2 The ſeconde of *Syena*, a citie in the confines of *Ethiopia*, vnder the Tropike of Cancer, cōteining in brodneſſe.7.degr.

{ beg.20.g.30.m. / end.27.g.30.m. } dies lo. { 13.h.15. m. / 13.h.45.m }

3 The third is named of *Alexandria*, a famous Citie in *Egypte*, conteyning in brodneſſe.6.g.10.min.

{ beg.27.g.30. m. / end.33.g.40.m. } dies lo. { 13.h.45.m / 14.h.15.m }

4 The fourth hath his denomination of that noble Ilande of *Rhodes* in *Aſia* the leſſe, whoſe brodneſſe is.5.g.20.m.

{ beg.33.g.40.m. / end.39.g.[illegible]. } dies lo. { 14.h.15. m / 14.h.45.m }

5 The fifte climate hath his name of the citie of *Rome*, whiche conteineth in brodneſſe.4.g.30.m.

beg.39.g.45.m.	dies lo.	14.h.45.m
end.43.g.30.m.		15.h.15.m.

6 The ſixte of the ſea *Euxine* called *Pontus*, which is.3.g.45.m.brode.

beg.43.g.30.m.	dies lo.	15 h.15.m.
end.47.g.15.m.		15.h.45.m

7 The ſeuenth is named of *Boriſthenes* a great riuer in *Scythia*, whoſe brodneſſe is.3.g.15.m.

beg.47.g.15.m	dies lo.	15.h.45.m.
end.50.g 30.m		16.h.15.m.

Some do adde the eight Climat by the South partes of England, and the ninth by the riuer *Tanais*.

The Southerne Climats, haue ỹ ſame names, putting only this Græke propoſition, Anti, before them.

A Paralele is iuſte halfe a Climate, ſo that one Climate conteyneth two Paraleles.

4 The

4 The meaſure of diſtance of one place from another.

Diuers nations do diuerſly meaſure the diſtance of places.

The Egyptians by ſignes or markes.

The Perſians by their Paraſangas.

The Grækes by furlonges.

The Latines by miles, and ſometimes by ſtones or markes.

The Spaniards & Frenchmē by legues.

The Germanes and diuers other natiōs by myles, and thoſe of diuers length.

Thoſe which do write of theſe matters, do all in a maner agrée in this, that foure graynes of barly do make a finger.

Foure fingers a hande.

Foure hands a fote.

Foure fote a Geometricall paſe, which is two ſimple paſes. fiue vide Clau: in Sacrob: 210

125. Geometricall paſes a furlong.

8. Furlonges one mile.

16. Furlongs a French league, which is two Italian miles.

3. Miles a great league. i. 24 furlonge.

30. Furlongs one Paraſanga, which the Perſi-

~~3 myles~~ ~~[illegible]~~ Persian parasanga.

3 myles and $\frac{3}{4}$ is a

5. Italian
miles make
one Germane.

Perſians at this day call Faraſanga.
40. Furlongs one Germaine mile.

To apply your degrées to the finding out of the diſtance of one place from another, by the number of miles (as they are cōmonly taken amongſt vs in Englande) you muſt vnderſtande that euery degrée containeth .60. miles on earth, ſo that if you multiplie .360. degrées, which is the compaſſe of the Equinoctial, by .60. you ſhall finde the worlde to conteine aboute the whole circumference of the earth and water .21600. miles.

If you take your meaſure of diſtance from the Equinoctiall line directly either Northwarde or Southward, or elſe vpon the Equinoctiall line Eaſtwarde or Weſtwarde, you néede no more but count your degrées, and for euery degrée count .60. miles: or if your Chart be true in proportion, open your compaſſe as wide as thoſe two places are aſunder, whoſe diſtance you woulde knowe, and apply the ſame to the Equinoctiall line, and multiplye your degrées as before, and ſo you ſhall haue your purpoſe.

In particuler and Chorographical

Chartes you may finde the true diſtance of any place from another, either by the numbers of longitude and latitude deſcribed in the margine of your Chart, or by the Scale which is moſte commonly made for that purpoſe. And if you wante bothe theſe helpes, take any two places wherof you knowe or may learne the true diſtance, and meaſure that, and according to that proportion you may finde out any diſtaunce in the Chart.

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